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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,142	10/21/2003	L. Murray Dallas	15912/09034	6042

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EXAMINER

BOCHNA, DAVID

ART UNIT PAPER NUMBER

3679

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,142

Applicant(s)

DALLAS, L. MURRAY

Examiner

David E. Bochna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4-7, 10-11, 20 and 28-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Volpin.

In regard to claim 1, Volpin discloses a threaded union, comprising:

first 12 and second 4 subcomponents are inter-connected by a nut, the first and second subcomponents having respective mating ends with complementary ring gasket grooves 7, 8 therein; and

a metal ring gasket 10 (see cross hatching) received the complementary ring gasket grooves, the metal ring gasket providing a high-pressure seal between the mating ends of the and second subcomponents when securely interconnected by the nut.

In regard to claim 2, wherein the nut 4 is a wing nut that is hammer-torqued.

In regard to claim 4, Volpin discloses a threaded union for providing high pressure, fluid-tight, metal-to-metal seal a fluid conduit, comprising:

A first subcomponent 52 comprising a generally annular body that includes a first mating end with pin threads 54; a threaded nut 20 having an annular top wall and box threads 61 for engaging the pin threads on the mating end of the first subcomponent; a second subcomponent 53 comprising a generally annular body that includes a second mating end with a radial flange 57 against which the annular top wall of the threaded nut 60 abuts so that the first and second mating ends are forced together when the box threads the threaded nut engage the pin threads of

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the first subcomponent; and a metal ring gasket 10 compressed between the first subcomponent and the second subcomponent to form a high-pressure, fluid-tight, metal-to-metal seal between the first subcomponent and the second subcomponent.

In regard to claim 5, wherein the metal ring gasket is compressed between the mating ends of the first 12 and second 4 subcomponents.

In regard to claim 6, wherein the metal ring gasket 10 is seated an annular groove in the mating end of the first subcomponent 12.

In regard to claim 7, wherein the annular groove 17 has beveled sides.

In regard to claim 10, wherein the second subcomponent has a beveled annular groove 8 having a bevel angle equal upper bevel angle of the metal ring gasket 10.

In regard to claim 11, wherein the threaded nut a wing nut 30 that includes hammer to permit threaded tightened using hammer.

In regard to claim 20, Volpin discloses a metal ring gasket 10 for use as a seal threaded union, the metal ring gasket comprising a generally annular body having a substantially flat top surface and substantially bottom surface being deformably compressed between first and second subcomponents of the threaded union.

In regard to claim 28, Volpin discloses a method of providing fluid seal between first 12 and second 4 components of threaded union, method comprising:

seating a metal ring gasket 10 in an annular groove mating surfaces 8, 17 the first and second subcomponents of the threaded union; and securing the first and second subcomponents together using a threaded nut 20 tightening the threaded nut, wherein high-pressure, fluid-tight seal between the first and second subcomponents is achieved by compressing the metal ring gasket between mating surfaces the and second subcomponents.

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In regard to claim 29, wherein the step of securing the second subcomponent the first subcomponent tightening the threaded nut comprises hammering lugs 30 on the threaded nut.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 12 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volpin in view of Parmesan. Volpin discloses a coupling as described above, but does not disclose that the nut is a spanner nut, which is torqued to a predetermined torque by a wrench. Parmesan teaches that hammer nuts and spanner nuts, which are torqued by a wrench are equivalents in the art. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to make the hammer nut a spanner nut because hammer nuts and spanner nuts are well known equivalents in the art, as demonstrated by Parmesan.

5. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volpin. Volpin discloses a beveled annular groove as described above, but does not disclose the exact angle of the bevel. However, it would have been obvious to make the bevels of the groove 23 degrees from the vertical, plus or minus 1 degree because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

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6. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volpin in view of Roche. Volpin discloses a threaded union as described above that can be used on various types of pipe lines, but Volpin does not specifically disclose that the coupling can be used on a well head. Roche demonstrates that using union type couplings on well heads is common and well known in the art. Therefore it would have been obvious to a person having ordinary skill in the art at the time the invention was made to use the union coupling of Volpin on a well head connection because the practice of using union couplings on well head couplings is common and well known in the art as demonstrated by Roche.

7. Claims 15-19, 21-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Volpin. Volpin discloses the use of a ring gasket as described above, but does not specifically disclose what type of material the gasket is made from. However it would have been obvious to make the gasket out of the materials recited by the Applicant because the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

8. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Volpin.

Volpin discloses a metal ring gasket with a polygonal cross-section as described above, but does not disclose that the ring has an octagonal cross-section. However, it would have been obvious to make the ring with an octagonal shape because a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

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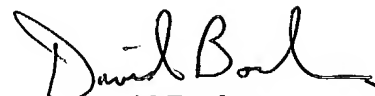
Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Richardson et al., Powers, McGarvey, Anderson, Singeetham, Wong, Weinhold, Roth, Kessler, Myers, Stillwagon, Snell et al., Bouchard, Brandt, and PCT Publication WO 89/03495 all disclose similar couplings common in the art.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



David Bochna
Primary Examiner
Art Unit 3679
July 22, 2004